Study programmes: MASTER STUDIES - Mathematics

Course name: Selected topics of differential geometry

Lecturers: Vladica S. Andrejić, Miroslava Ž. Antić, Srđan N. Vukmirović, Mirjana Đ. Đorić, Zoran S. Lučić, Zoran P. Rakić

Status: Optional

ECTS: 8

Attendance prerequisites: No prerequisites.

Course aims: Acquisition of general and specific knowledge in some topics of geometry selected by a teacher.

Course outcome: Upon completion of the course, the student mastered basic notions from selected topics of differential geometry. Student is qualified to individual work and using acquired knowledge.

Course content: Geodesic mappings. Homogeneous manifolds. Transformation groups in differential geometry. Symplectic geometry. The Minkowski space.

Literature:

- 1. J. Mikeš, A. Vanžurova, I. Hinterleitner: Geodesic mappings and some generalizations, Palacky University, Olomouc, 2009.
- 2. Б. Балащенко, Ю. Никоноров, Е. Родионов, В. Славский: Однородные пространства, теория и приложения, Полиграфист, Ханты-Мансийск, 2008.
- 3. S. Kobayashi: Transformation groups in Differential Geometry, Springer, New York, 1972.
- 4. G. Naber: The Geometry of Minkowski Spacetime, Springer, New York, 1992.

Number of hours: 7	Lectures: 3	Tuto	rials: 2	Laboratory: -	Research : 2
Teaching and learning methods: Frontal / Tutorial					
Assessment (maximal 100 points)					
Course assignments		oints	Final exam		points
Lectures		-	Written exam		-
Exercises / Tutorials		-	Oral exam		60
Colloquia		-	Written-oral exam		-
Essay / Project		40			